

Removing Barriers, One City at a Time





The DE “Road Show”

1. A full-day training for LOCAL regulators (building & fire safety inspectors, city/county planners, local air quality regulators)
2. Technologies are chosen by the LOCAL participants, NOT DOE personnel or third-party hosts (i.e., utilities, energy companies)
3. Purpose: to introduce LOCAL regulators to new technologies/fuels/applications they will someday be asked to permit for installation & operation, and ascertain what follow-on information, educational tools, and training forums they find most useful.
4. All Q&A, comments are recorded throughout the day, shared with participating companies and used for developing next-generation materials.

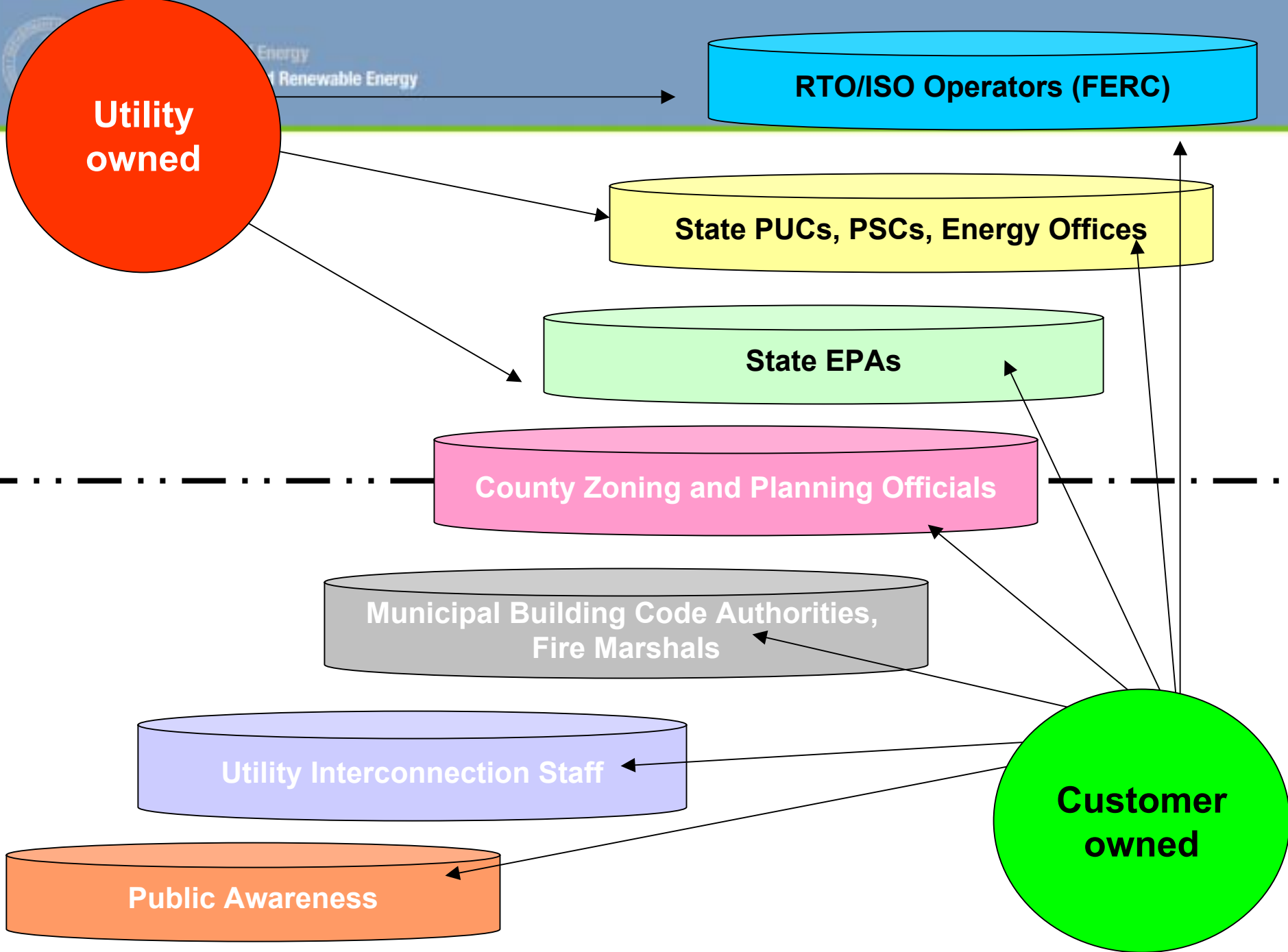


Most Common Road Show Question from Within the DE Complex:

“Why aim for the LOCAL regulators first?”

“And why building code, or fire inspectors?”

(“They’re so boring.”)





Road Show Discussion Points

1. Why we (federal government) are here
2. Why you (local government) are here
3. What's coming (tech/business).....
4. Your role is in this change
5. What additional tools you need to make this transition



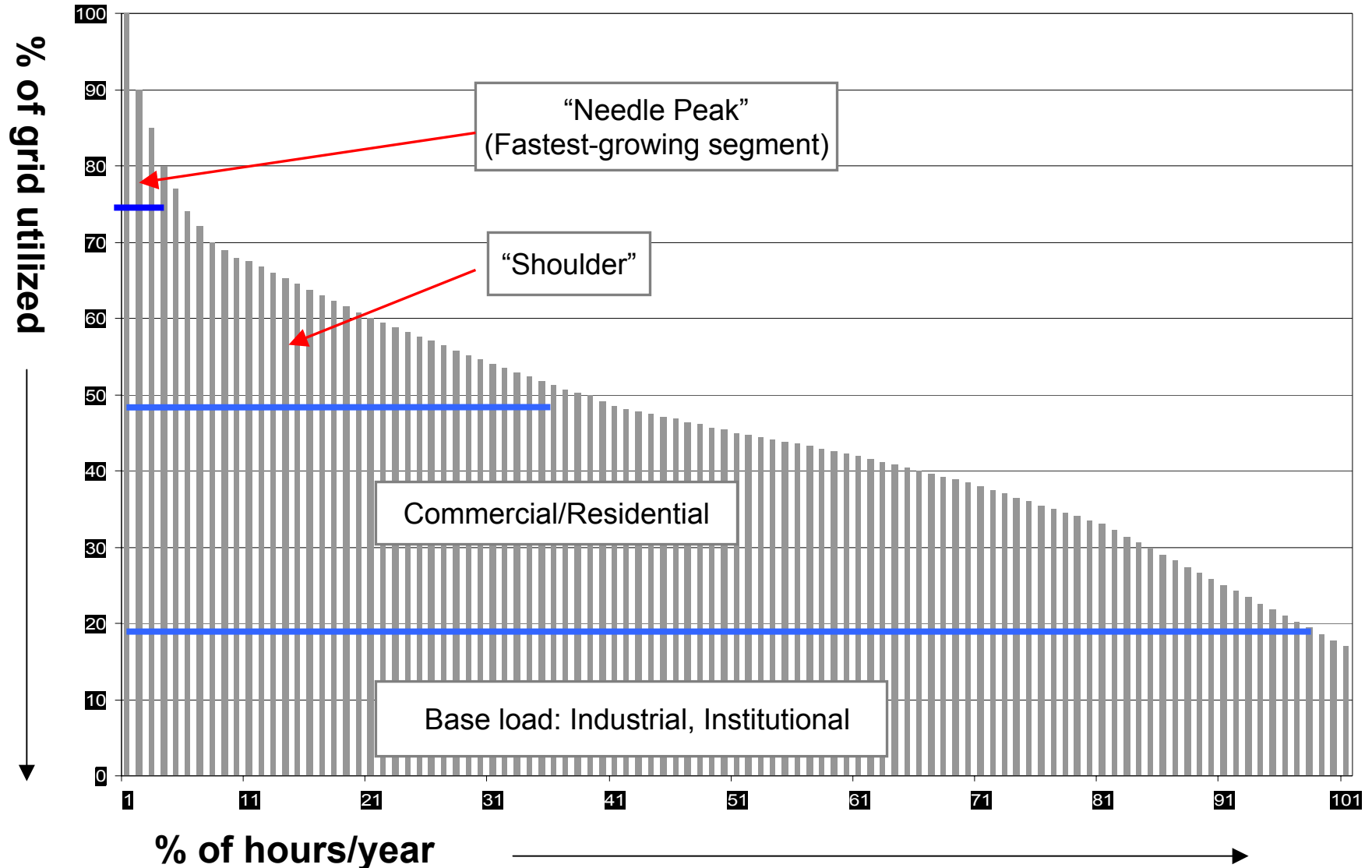
Electricity Regulation Post-1929

“We need a utility system that...”

1. Provides universal access (rural customers and small towns must not be left out)
2. Operates at a minimum level of reliability (can't have whole communities without power for weeks or months)
3. Operates at an acceptable cost (utilities allowed to spread costs across all customers for 30-year periods)

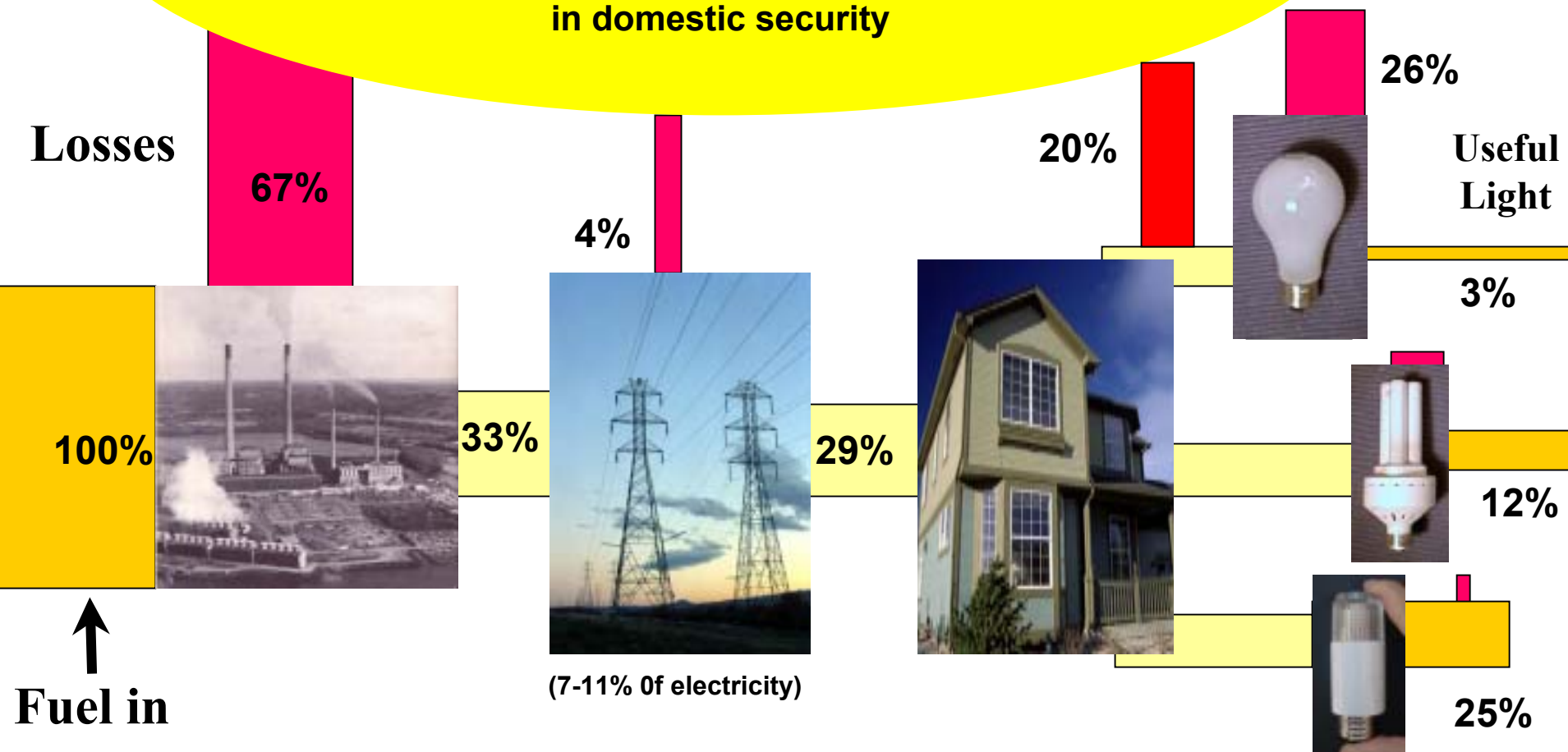


Load Duration Curve (annualized)



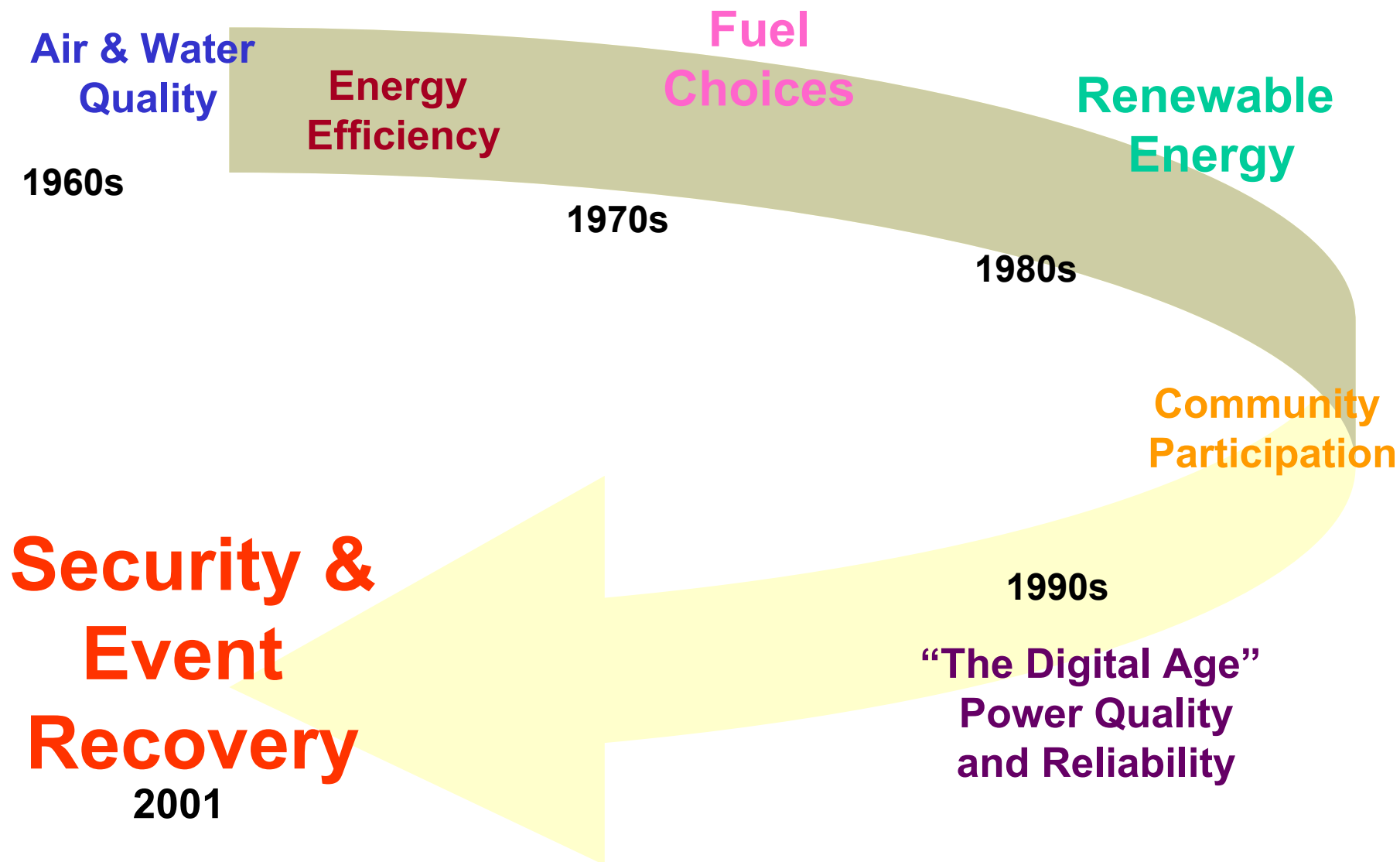


**Greater than 90% of the Btus
in the original fuel are lost by the time we produce
an end product; this (1) impacts the cost of
business in the U.S.; (2) affects the price of electricity, heating
and air conditioning to you; and (3) plays a role
in domestic security**





Over time, new values emerged





The Federal Role

The DOE does not REGULATE energy (your state utility commission does that); it furthers the Administration's goals by:

- ✓ Long-term R&D programs
- ✓ Technical and economic analyses, public and regulatory education programs



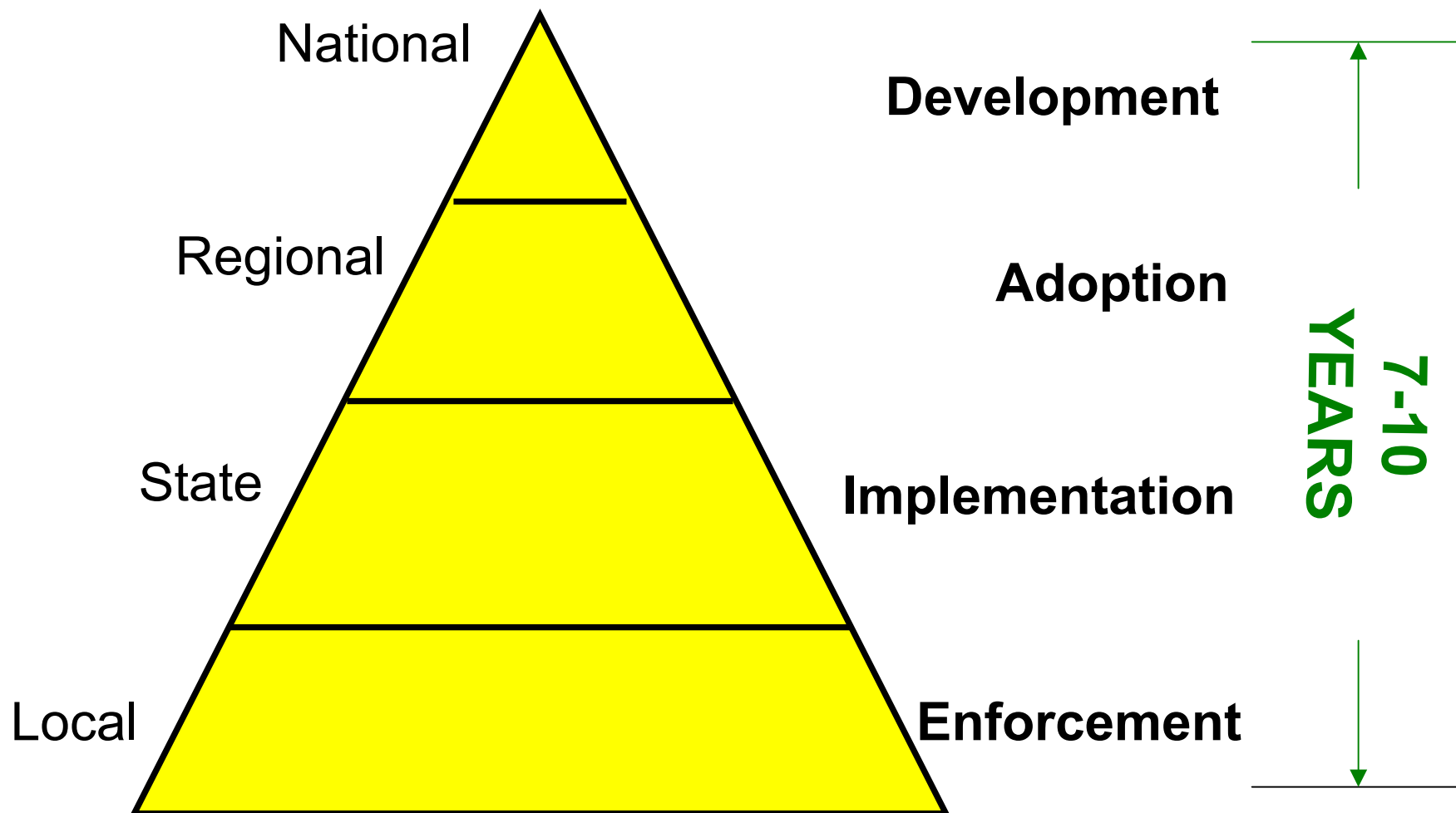
And at the end of the R&D program...



...we hope it finds a market



From National Standards to Local Building Codes



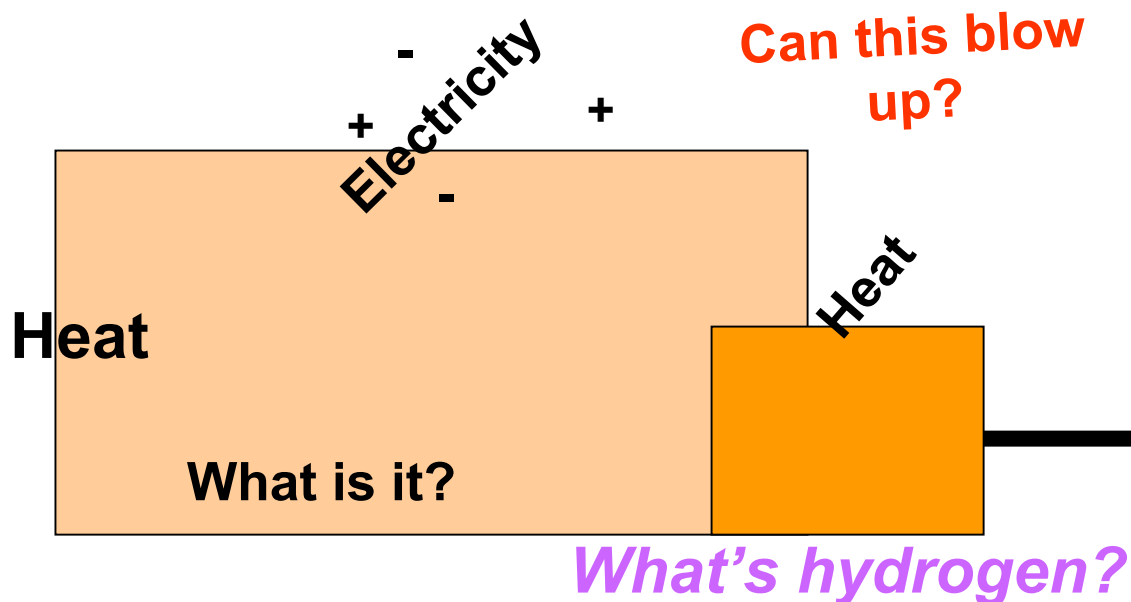
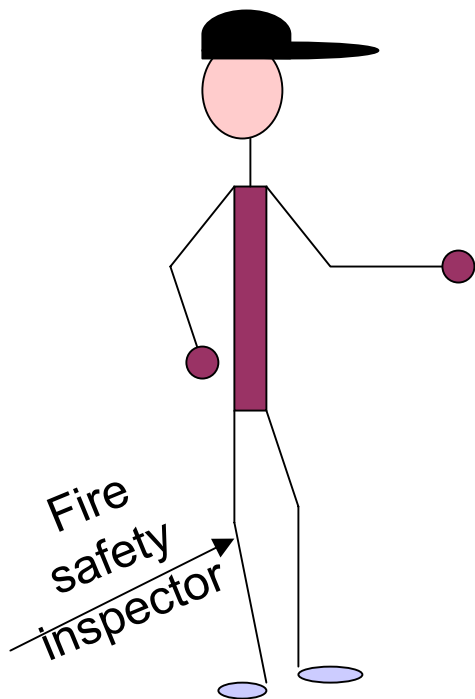
A large yellow arrow pointing to the right, with the word "Meanwhile..." written in bold blue text inside it. To the left of the arrow's tail are two vertical yellow bars of different heights.

Meanwhile...



“Am I on camera?.... Is this one of those hidden camera shows?”

Actual fuel cell permitting experience (location omitted)





So.....

ASK QUESTIONS

Ask questions ask questions ask questions ask questions ask



Road Show Topics

Technologies

- Microturbines
- Advanced Recip Engines
- Sterling Engines
- PV/Solar
- Wind
- Fuel Cells

Fuels

- Hydrogen
- Methanol
- Biomass

Applications

- CHP
- Peak Shaving/Peak Sharing
- Off-Grid
- Grid Parallel (Electrical Interconnection)

Local/State Issues

- PUC
- State EPA/DEQ

Host organization
chooses topics



To-date.....

- 35 Road Shows completed (including Alaska)
- Over 2,000 attendees
- 60 participants/show (average)

Only 115 to go.....



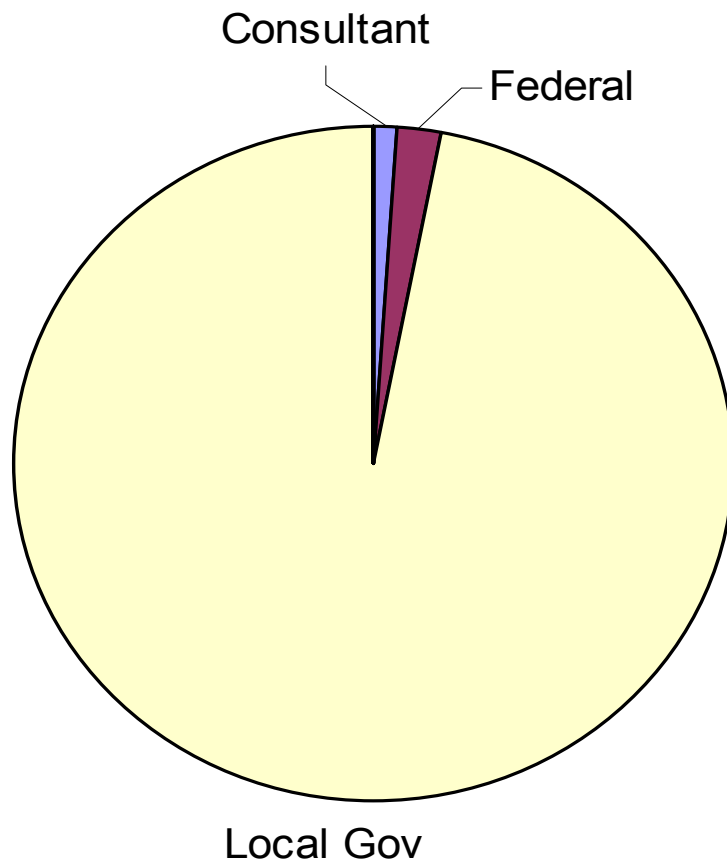
Road Show Lesson #1

A large yellow rectangular graphic with rounded corners and a scroll-like border, containing the text "HOST = AUDIENCE".

HOST = AUDIENCE



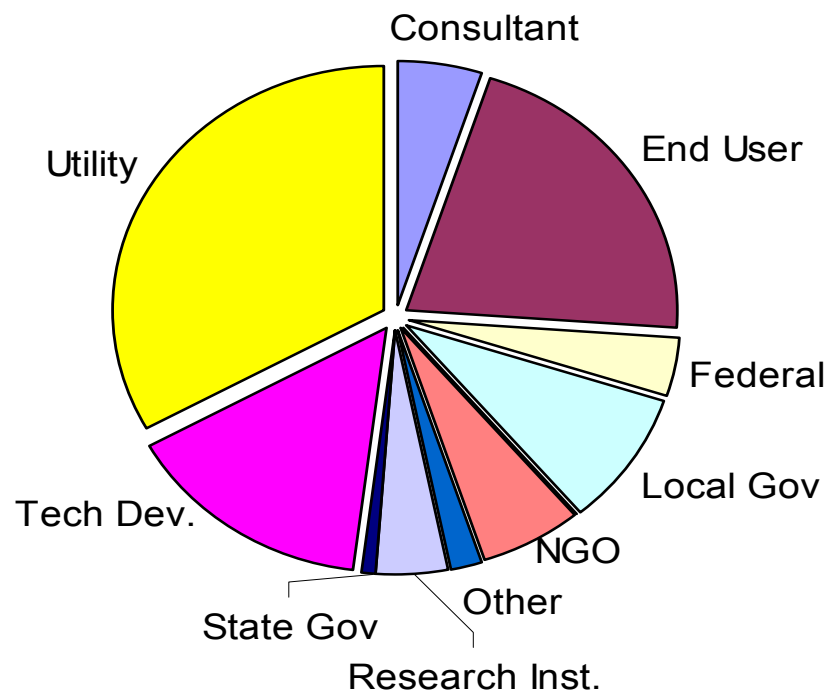
Sturbridge, Massachusetts (94 attendees)



Host: Massachusetts Building Commissioners and Inspectors Assn.



Milwaukee, Wisconsin (100 Attendees)



Host: WE Energies & City of Milwaukee



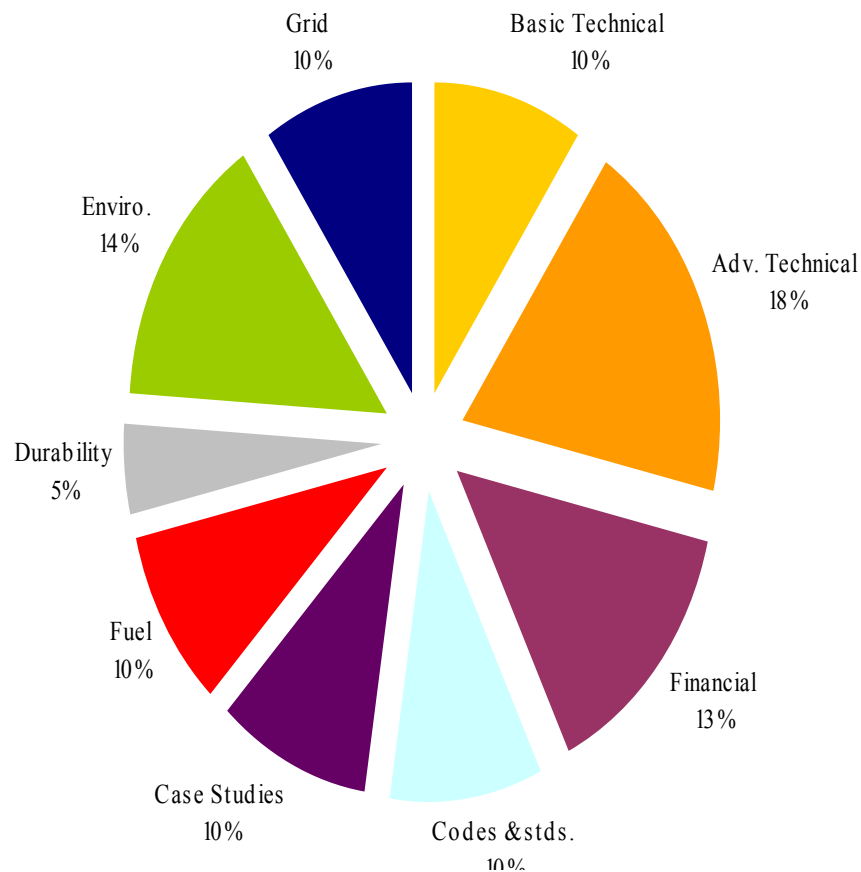
Road Show Lesson #2

ASSUME NOTHING....

(technically)



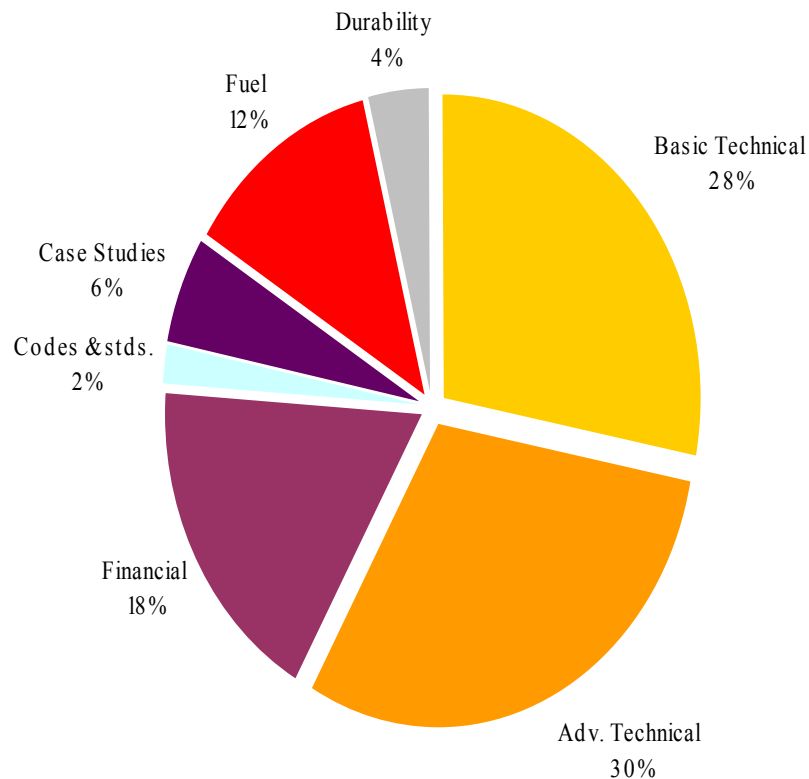
Road Show Q&A: Combined Heat and Power



“What is it?”



Road Show Q&A: Microturbines

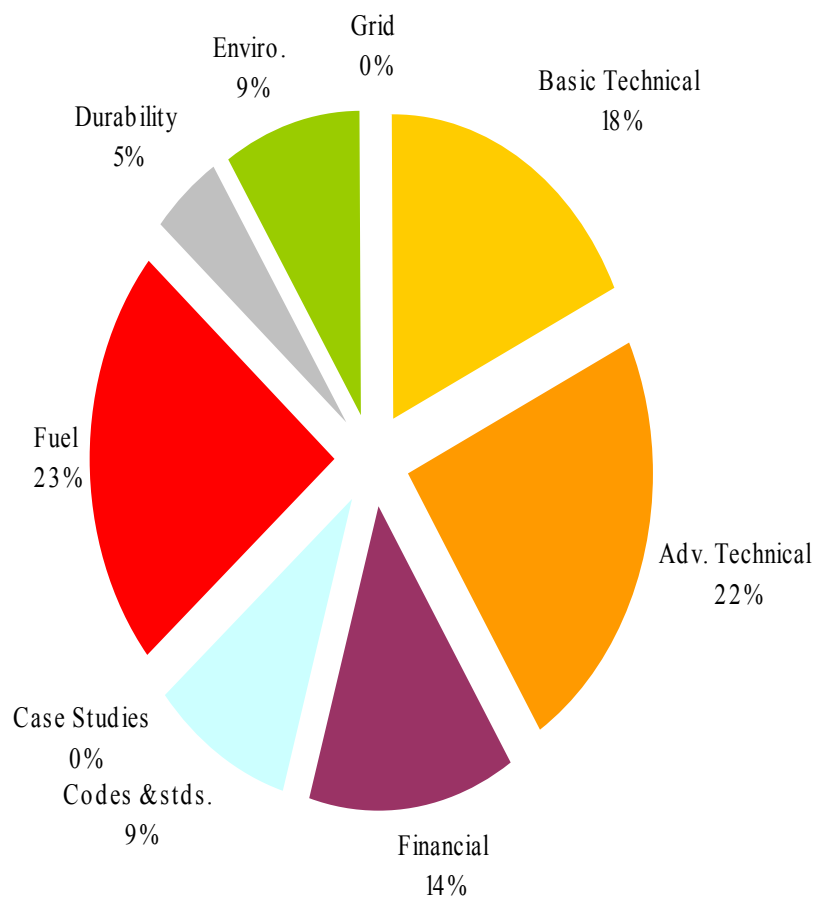


“Is this like some kind of turbo racing engine?”

“I’ve heard.....”



Road Show Q&A: Reciprocating Engines





What's Next.....

- Databases – attendees, speakers, follow-on workshops, etc.
- Incubator Project (Neil Rossmeissl)
 - Northeast states, statewide training & materials
- State Education/Outreach
 - tariffs, standby & backup rates, emissions regulation, statewide electrical interconnection stds.

Replication/Acceleration
Train-the-Trainer



Most common participant question:

“When can we do this again?”



<http://www.eere.energy.gov/der/roadshow.html>

THANK YOU

Anne-Marie Borbely-Bartis
(Battelle at) U.S. Department of Energy